Reconciling Livability and Sustainability: Conceptual and Practical Implications for Planning

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Abstract

This article examines the complementarity of livability and sustainability at a theoretical level but recognizes that linkage in practice is complex. Connection between these concepts is examined through the analysis of comprehensive plans in fourteen jurisdictions in the Mississippi Gulf Coast, where a federally funded regional planning process was initiated to create "livable sustainability." Results show variation in local plan compliance with the livable sustainability guidelines in the region, with particular challenge integrating nontraditional planning concerns. Attention to issues of scale, context, and potential to enable change will help planners promote long-term sustainability while recognizing local livability preferences.

Keywords

livability, sustainability, comprehensive plan, Partnership for Sustainable Communities

Introduction

Recent decades have ushered an upwelling of interest in community livability and sustainability, manifested in high public participation and greater commitment by governments to provide resources to plan for communities. Until recently, initiatives to enhance livability and sustainability have been largely community-based, responding to issues of local concern (Miller, Witlox, and Tribby 2013). This trend changed in 2009 when the U.S. federal government announced an unprecedented interagency collaboration between the Department of Housing and Urban Development (HUD), the U.S. Environmental Protection Agency (EPA), and the Department of Transportation (DOT) to coordinate federal investments in housing, transportation, and the environment to promote long-term investments in sustainable community development (Partnership for Sustainable Communities 2010). This federal Partnership for Sustainable Communities ("partnership") has provided competitive funding to communities that could demonstrate how their planning efforts would incorporate a set of six livability principles (USEPA 2009). In 2010, \$100 million was awarded to support regional planning efforts that integrate housing, land use, transportation, and economic and workforce development. The Partnership screened and prioritized grant applications that outlined programs for inclusive and representative public engagement, and clear approaches to address the interdependent challenges of economic development, revitalization, access to opportunity, and environmental protection. The Mississippi Gulf Coast region was first among those supported by this interagency Partnership to complete

a planning process for long-term sustainability based on specific livability guidelines outlined by the federal government. Similarly, this region is among the first to grapple with the practical context of reconciling livability and sustainability within the context of this federal program.² Attention to the connections between livability and sustainability is made relevant in a policy context with the new infusion of federal resources, to promote community livability while simultaneously supporting broader goals of sustainability.

Planners working on this frontier of livability and sustainability practice still operate without consensus on conceptual connections and methods to navigate the messy terrain of tensions between these sometimes competing visions for urban planning. There is increased interest across disciplines of community planning, environmental management, and transportation in examining relationships between livability and sustainability, primarily in the contemporary context of urban development and resource consumption (Chazal 2010; Holden and Scerri 2013; Howley, Scott, and Redmond 2009; Newton 2012). Scholars have argued that while consensus

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on definitions of livability and sustainability is important to advance theory and practice (Vallance, Perkins, and Dixon 2011; van Kamp et al. 2003), perhaps even more valuable are the linkages between concepts, identifying areas of potential conflict and complementarity (Allen 2010; Ruth and Franklin 2013). Given the limitations of current conceptualizations of livability and its relationship with sustainability, ways to reconcile these concepts must be examined to anticipate challenges and formulate strategies for implementing livable and sustainable land use policies.

This article examines the conceptual and practical considerations of reconciling livability and sustainability by examining local comprehensive plans from a region that participated in a federal program to advance sustainable communities that are also livable. I divide this article into three parts. The first part engages the literature on sustainability and livability to show that there is both considerable overlap and separation between concepts, providing space for tension and complementarity. The second part investigates comprehensive plans for the coupling of livability and sustainability in fourteen jurisdictions in the Mississippi Gulf Coast. Using examples from this region, I show how the nexus between livability and sustainability plays out in practice. The third part draws lessons from these examples and suggests what planners and funding agencies can do to systematically establish connections between the goals of sustainability and livability. A principal finding is that independently applying livability and sustainability concepts to comprehensive planning leaves both concepts as ideal types, good for understanding but limited in practice.

Linkages of Livability and Sustainability

"Livability" and "sustainability" are popular concepts for urban planning and general public discourse, largely because they are representative of values, priorities, and behaviors to which many people and institutions subscribe. It is widely assumed that consumers should have a right to both "livable" and "sustainable" communities, which raises questions for planners and decision makers about how to satisfy the needs and desires of current and future residents. Yet, the conceptual linkages between livability and its counterpart sustainability are not fully understood, limiting agreement on the policies to promote these ideals and their assessment (Portney 2013; van Kamp et al. 2003). Drawing from existing literature, this section elaborates on the conceptual tensions between livability and sustainability—their distinctions and complementarities—and explores how they can be further understood and reconciled. The purpose here is not to provide a review of the well-documented concept of sustainability but rather to identify areas of difference and overlap between sustainability and livability. This clarification is of importance now, as research starts to tackle this conceptual relationship and as practitioners and policymakers wrestle with the nexus of these concepts in application and decision making.

It is easiest to understand livability when placed in comparison to sustainability. Sustainability is considered an elusive concept, which is simultaneously difficult to understand theoretically and even more challenging to operationalize and implement in practice. After decades of discussion without consensus on a definition of sustainability, the most widely used is that of the Brundtland Commission: "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED 1987, 8). This definition is criticized for being too anthropocentric and focused on ambiguous assumptions of the "needs" of present generations and those of future generations. More technical sustainability formulations have been proposed, emphasizing concern for different outcomes, such as the ecological impacts of human activity (Wackernagel and Rees 1997), economic impacts of growth (Daly 1990), and the implications of such outcomes on social equity (Bullard 1990), among many others. More recently, urban scholars searching for an operational definition of sustainability have embraced the notion of balancing the interests of economics, environment, and equity, while also recognizing the intergenerational demands inherent in the Brundtland Commission's definition (see, e.g., Roseland 2012; Chifos 2007; Jepson 2004; Berke and Conroy 2000). The synthesis of these considerations has produced several variations similar to the working definition used here: sustainability implies moving toward the long-term welfare of the "three Es," or economic opportunity, environmental quality, and social equity.

In practice, the application of sustainability is often full of intractable conflicts. Evidence of this concept's limitation is seen through implementation that largely favors one principle over the other two, often with social equity more restricted in prioritization (Conroy 2006; Howley, Scott, and Redmond 2009; Opp and Saunders 2013; Saha and Paterson 2008), rather than a balance prescribed for the three Es (Campbell 1996). Similarly, the long-term view of sustainability introduced by the Brundtland Commission presents an important tension between the immediate needs of the present generation and those of future generations, resulting in negotiation at various levels of government over whose sustainability and at whose expense (Holden 2012). Therefore, the notion of sustainability provides an attractive vision but on its own largely fails to move beyond a normative theory to adopted practices.

Livability, by contrast, brings a necessary pragmatism to the philosophical visions of sustainability. Livability is about "now" and "here," focused on immediate and tangible conditions and interventions, and therefore interpreted as more achievable (Ruth and Franklin 2013). Increasingly, focused interventions are introduced in community plans and policies to impact the experience of place—where people live, how they travel to work, and ways that they interact with each other and their surroundings—to make them more "livable" through policies that promote the well-being and provision

of services that a community needs or desires (Blanco 2012; Holden and Scerri 2013; Seetharam and Yuen 2010). Despite scholarly recognition that livability is a subjective concept, there is general agreement that a livable community is one that offers choice and diversity in the range of amenities available to people who live and work in the community (Wagner and Caves 2012; Wheeler 2013). Although not usually stated explicitly, the following definition of livability is implicit: Community livability is constructed by the sum of the physical and social characteristics experienced in places—including the natural environment and a walkable and mixed-use built environment, economic potential near diverse housing options, and access to a broad range of services, facilities, and amenities—that add up to a community's quality of life. This interpretation of livability, which underlies research analyzing the impact on livability of amenities such as transportation, neighborhood walkability, and access to park space, allows for comparison across communities in terms of their "livability" (Khalil 2012; Marshall 2013; Miller, Witlox, and Tribby 2013; van Kamp et al. 2003).

Understanding how livability sits next to sustainability will help planners bridge the desires of residents in the present moment with longer-term needs associated with a sustainability vision. Once basic needs, such as food, shelter, and security are fulfilled, individuals typically emphasize concern for matters over the short term, including livability preferences (Maslow 1998; Ruth and Franklin 2013). Discussion about the tensions—or conflicts—between livability and sustainability was introduced a decade ago when Godschalk (2004) modified Campbell's (1996) urban planning triangle of "resource," "development," and "property" conflicts related to sustainability by adding a "livability" dimension. The "growth management conflict," which develops from competing beliefs that market-driven, unmanaged development can result in livable environments; the "green cities conflict" that arises from competing beliefs in the prioritization of natural versus built environments; and the "gentrification conflict," which results from the competing beliefs in preservation of neighborhoods for the benefit of current residents versus their redevelopment to attract higher-class residents. This perspective is important because it offers another view to the sustainability discourse, which has largely assumed desirable outcomes for all. The concerted recognition of these conflicts, and the acknowledgement that resident values and their perceptions of livability can trump their long-term sustainability concerns, can inform the design of livable cities that are also sustainable.

Although these notable distinctions between sustainability and livability imply competing normative and evaluation principles—and different remedies for their respective inherent concerns, there is an important nexus between the two concepts that may assist in the other's success. Livability interventions represent the incremental steps that collectively increase the potential for longer-term strides toward sustainability. "Livable sustainability" has been discussed

elsewhere as the result of accommodating short-term, urgent needs or desires of community within a plan for larger scale, longer-term prospects of sustainability (Allen 2010; Holden and Scerri 2013). In this sense, livability constrains sustainability, but does not directly orchestrate it. Instead, sustainable outcomes result over time through a series of livability outcomes. Together, the conceptual linkages between livability and sustainability reveal tensions, but also complementarities that can assist with the other's implementation. Here, I expand this discussion to also recognize that the complementarities of livability and sustainability constitutes an important viewpoint for land use planning. Informed by this precedent work, I propose a framework by which to consider these concepts (Table 1), showing that differences between livability and sustainability can be reconciled and perhaps used to drive planning synergies through three organizing principles: scale, context, and potential.

Scale

The strongest analytical difference between livability and sustainability rests in issues of scale, with primary distinctions nested in geography, time, and the public defining these concepts. The scalar tensions between livability and sustainability are best understood from the perspective of a familiar definition of sustainable development: "Meeting the needs of the present generation without compromising the ability of future generations to meet with own needs" (WCED 1987, 1). This accepted definition suggests a macro-level or global geographic application, considers long-term and intergenerational time horizons, and is conceptually defined through conversations and ethos of a globally shared agenda.

By contrast, the concept of livability grew out of a view that environmental, economic, and equity issues must be considered at a narrower spatial scale relevant to individual people, households, neighborhoods, and communities in geographically smaller areas (Pacione 1990, 2003; Portney 2013). Reinforcing this concept, in 1992 the United Nations Conference on Environment and Development (UNCED) passed "Agenda 21" to guide nations in their efforts toward sustainability by investing attention to the impacts of local activities. The resolution recognized the power of localities to "construct, operate and maintain economic, social, and environmental infrastructure, oversee planning processes . . . and assist in implementing national and subnational environmental policies" (UNCED 1992, section 28.1). More than twenty years after its passage, Agenda 21 remains a centerpiece of debate around concepts of individual rights and preferences at the expense of collective responsibility for the future.

Contemporary politics surrounding livability expose the tensions between livability and sustainability, highlighting a lack of consensus regarding who defines and benefits from these complementary concepts, conceived and traditionally applied, at different scales. When assessing these tensions,

Table 1. Conceptual Linkages between Livability and Sustainability.

| Concepts | Livability | Sustainability | Similarities | Tension | Complementarity | Sample References |
|-----------|---|---|---|---|---|--|
| Scale | Locality or region specific; gives primacy to local activities | Locality is more abstract; gives primacy to common national or global activities | Recognize legitimacy of present conditions and inadequacy of individual to find solutions | What is the appropriate geographic applicability? | Livability needs sustainability to consider the benefits and burdens of | Ley and Newton 2010; Portney 2005; Portney 2013; Miller, Witlox, and Tribby 2013; Litman 2007; |
| | Micro-level behavior changes encouraged | Macro-level appeal to large geographic or global conditions and behaviors | Drain legitimacy from the present; behavior change imperative | | intergovernmental actions | UNCED 1992 |
| | Immediate; direct influence on people, neighborhoods and cities | Long-term; effects are indirect on nations and world | Forward orientation that requires formulation of solutions | Who should define and benefit from these concepts? | Sustainability needs livability to influence behavior change | |
| | Locally defined through civic engagement | Defined through conversations and ethos of a globally shared agenda | Translates collectively defined concept into a common agenda | | through locally relevant conditions | |
| Context | Calibrates with local concerns and values; conceived by the preferences of local stakeholders | Espouses global values that demand representation and reconciliation of all values: economic, environmental, and equity | Recommendations based on informed choices and assumption of social equity vulnerability | Should priority be given to "livable sustainability" or "sustainable livability"? | Livability needs sustainability to ensure that equity, economics, and environment are | Allen 2010; Berke 2002; Campbell 1996; Chazal 2010; Godschalk 2004; Newton 2012; Holden and Scerri 2013; Gasparatos et |
| | Dynamic and allows changes over time; differential weights assigned to measures depending on context | Maintains a consistent vision; considered static or unmoving | Against reductionist assessment approaches | | accounted for in local preferences | al. 2009; Godschalk 2004; Litman 2007; Litman 2011; Ruth and Franklin 2013; UNCED 1992 |
| | Stakeholders are clearly identified; indicators promote solution | Stakeholders indirectly represented; roles and responsibilities of stakeholders unclear | Similar overarching goals identified through shared perceptions of need | Should priority be to desires of the present generation or anticipated | Sustainability needs livability in order to be relevant to specific stakeholders | |
| | Direct impetus from those who benefit and are burdened | Benefits or burdens accrue intergenerationally and through a vicarious expression | Future benefits and burdens are predicted through consultation with diverse branches of knowledge and expertise | desires of future generations? | | |
| Potential | Relatively easily understood and conceptualized | Conceptually compelling but practical significance not understood | Seeks common understanding among stakeholders | What type of evidence lends credibility for | Livability needs sustainability to ground actions and | Van Kamp et al. 2003; Allen 2010; De Roo and Miller 2000; Lynch 1960; Holden |
| | Facilitates political support; promotes loyal stakeholders | Intellectually compelling, e.g., climate change; verification contested | Demands and obtains policy and political acknowledgement | public support of investments? | investments for future change | and Scerri 2013; Miller, Witlox, and Tribby 2013; UNCED 1992 |
| | Receptive to design and planning interventions, responding to transactional relationship between people and place | Holistic orientation with no "quick fix" interventions | Requires coordinated action and responsibility; responsive to planning and policy decisions | What outcomes from interventions and investments count as relevant? | Sustainability needs livability to demonstrate its practical relevance | |
| | Supports incremental improvement, increasing livability in one place without corresponding increase in others is possible; local maxima allowed | Searches for global maxima; comprehensive approach | Pursues mandates for change | | and potential for change | |

scale is a critical factor because land use issues and their immediate stakeholders vary quite a lot between regional, municipal, and neighborhood scales (Godschalk 2004). The power to conceptually define livability has long been recognized in discussions of livable cities, focusing attention on whose interests are served by various definitions. Ley (1990) observes that livability has been a dominant urban discourse since the 1970s, where limited attention to community wellbeing ignited competition between groups for the "power to define the quality of urban life." Although at smaller geographic scale than sustainability, livability planning for place-based attributes of a particular geographic location (e.g., city or region) encounters an increasingly diverse group of publics. These publics compete for the meaning of livability, with the expectation that interventions will have immediate influence on the needs of the locality (Newton 2012; Portney 2005).

While competing publics can use the political or public debate process to influence the definition and beneficiaries of livability investments, the broader and long-term scale of sustainability limits the tangible power of stakeholders. Planning research has considered the challenges inherent in the formidable scale of sustainability both in terms of its definition and its audience. For example, there is continued disagreement about whether the integrative economic, environmental, and equity concerns of sustainability is too holistic to be effective in terms of its definition and its potential beneficiaries (Agyeman and Evans 2004; Campbell 1996). Furthermore, limited stakeholder understanding about the relevance of sustainability to more local areas impacts the success of initiatives to support long-term sustainability (Conroy 2006; Koontz 2006; Roseland 2012).

While scale is a useful organizing concept to consider tensions between livability and sustainability, it can also serve as a frame to recognize complementarity between them. Grounding sustainability in the local context—through livability initiatives—makes room for implementation of local policies, regulations, and incentives that can help achieve broader sustainability. Implementation of the policy will require behavior change, which can be overseen and encouraged more readily by local authorities in small geographic areas.

Context

Context is another organizing principle that reveals linkages and differences between livability and sustainability, emphasizing how each paradigm conceptually responds to the values of stakeholders and how each adapts to changing conditions or preferences. While sustainability assumes an unchanging vision that joins economic, environmental, and equity values, livability is dynamic and evolves in response to shifting conditions and values (Allen 2010; Chazal 2010; Godschalk 2004).

The concept of livability in the United States has shifted in the past fifty years with changes in human values informing evolving theories and practices of planning. Events and legislation of the 1960s empowered the civil rights movement, resulting in advocates for the needs of traditionally marginalized groups (Davidoff 1965). The environmental movement of the early 1970s focused attention to protecting the natural environment and giving power to citizens, who had been marginalized by corporate America, to protect their quality of life (Carson [1962] 2003; Jacobs 1961). The late 1970s and early 1980s introduced the coevolvement of the environmental justice and the sustainable development movements, coupling social objectives with economic and environmental concerns (Bullard 1990; Rees 1995). Smart Growth, New Urbanism, and livable community movements of the 1990s integrated design into our conception of livability (Duany, Plater-Zyberk, and Speck 2000; Fainstein 2000). Now, the first decade of the 2000s has seen the rise of values associated with community health and food systems movements that aim to address issues such as access to healthy foods and community design to encourage physical activity (Dill 2009; Kaufman 2004). Paralleling the examples above, definitions of livability have changed over time and geographically with the associated human values.

Within the context presented here, tension between livability and sustainability centers on whether priority should be given to "livable sustainability," or "sustainable livability," where distinction between the two is made through identification of the primary and secondary values (e.g., livability or sustainability). For example, "livable sustainability" places the primary value on visions of sustainability, and livability assumes a secondary value (Allen 2010; Holden and Scerri 2013). From a practical viewpoint, a "good" sustainable decision does not always create desirable outcomes from every perspective (i.e., economic opportunities, affordability, public health), especially if little consideration is given to whether people find these outcomes livable (Godschalk 2004). Alternatively, there is evidence that "livable" communities are frequently designed at the expense of sustainability, allowing local preferences for livability to trump broader visions of sustainability (Chazal 2010; Howley, Scott, and Redmond 2009; Newton 2012).

Still, the complementarity of these concepts is possible, as livability offers a way to translate sustainability into a context that relates more closely to interventions: livability represents the messy and changing domain through which sustainability is implemented. Sustainability is a constant beacon that attaches accountability to a set of (potentially unattainable) aspirations of balancing long-term environmental, economic, and equity concerns and whose stakeholders are indirect and not always clear. By contrast, livability as a fluid concept that changes based on conditions of the context and the community values helps to bring relevance for stakeholders and decision makers to abstract sustainability visions.

Potential

A final organizing category for recognizing linkages between livability and sustainability is "potential" to enable change through interventions. The planning profession has long asserted that if we accept sustainability as a formidable vision on its own, it may face the same critique that was made against rational comprehensive planning in the 1960s, which was accused of being too idealistic given limits in knowledge and resources. Invoking the lessons from planning theory fifty years ago, the ideal vision of long-term sustainability must be broken down into pragmatic, incremental strategies for livability.

The strong local component of livability emerges in practical terms when potential to enable change through policy and planning prescriptions starts to sort people by the communities in which they locate. Residents and businesses reveal their livability preferences as they "vote with their feet" to relocate to alternative locations where they can receive—and may be best able to pay for—different quality of life amenities (Faggian, Olfert, and Partridge 2012; Miller, Witlox, and Tribby 2013). The contemporary reintroduction of livability into the urban planning discourse creates the opportunity to improve policy relevance and political buy-in because livability is broken down into measurements of success based on the local political reality, where local opinion and preferences count (Myers 1987, 1988). Unlike broader sustainability visions, the implementation of livability preferences—such as walkable neighborhoods or safe public spaces—are within the purview of local agencies and planners who can "shape the environment within which people's needs and aspirations unfold" (Ruth and Franklin 2013), and therefore demonstrate higher potential for change.

Complementarity of these concepts is evident in the claim that visions, like comprehensive plans, are only effective if they are implemented or inspire action. On its face sustainability encompasses formidable goals that are not broken down into incremental steps that engender support through political and social relevance; therefore it is not embraced as a practical solution, but rather dismissed as an ideal that cannot be implemented or achieved. Because livability manifests itself over the short term as a means to realize the long-term goal of sustainability, these concepts can act as reinforcing or positive feedback loops: to ensure that locally conceived livability policies remain in concert with global sustainability goals and that practical steps toward sustainability goals are translated into livability strategies.

While there is growing but separate literature on what defines a livable community and a sustainable community, understanding their hybridization is less clear. Conceptual tensions inherent in this linkage, and the ways in which scale, context, and potential may reconcile these tensions can be best understood if they are connected to practice. The following section addresses this question of linkages

between livability and sustainability, by placing it in the practical context of the recent U.S. federal Sustainable Communities Partnership which provided guidelines to plan for livable sustainability, and awarded grants to applicants that could demonstrate their intention to integrate these guidelines in their planning. To do so, comprehensive plans from fourteen Mississippi Gulf Coast jurisdictions were evaluated to determine their level of compliance with specified standards for livable sustainability. Evaluation results are used to select a sample of a low, moderate, and high conforming plan for further analysis of tensions and complementarities between livability and sustainability.

Assessing Mississippi Gulf Coast Livability

The Mississippi Gulf Coast has worked incrementally, since the years following Hurricane Katrina in 2005, to create a more sustainable region. Community planning efforts were initiated immediately after Hurricane Katrina and resulted in initial rebuilding plans for incorporated communities, but these initial plans were focused on urban design visions, making them limited in their scope for long-term implementation (Evans-Cowley and Gough 2009). Then in 2006, the U.S. Department of Housing and Urban Development provided funds to the Mississippi Development Authority to enable production of longer-term comprehensive planning for each of the eleven cities and three counties on the Mississippi Gulf Coast. The 2006 federal funding provided a unique opportunity for each of the fourteen jurisdictions in the Mississippi Gulf Coast region to simultaneously undertake local comprehensive planning that would lay the foundation for a more sustainable Gulf Coast (Figure 1).

In 2011, the Gulf Regional Planning Commission (GRPC), which serves as the Mississippi Gulf Coast Metropolitan Planning Organization, was awarded federal funding to initiate a multiyear planning process to increase the region's long-term sustainability by adhering to a set of guiding principles designed by the federal government. These guidelines for livability were to serve as measures to benchmark existing community conditions and then as direction for planning priorities and investments (U.S. Environmental Protection Agency 2010):

- 1. Provide more transportation choices: Develop safe, reliable, and economical transportation choices to decrease household transportation costs, reduce our nation's dependence on foreign oil, improve air quality, reduce greenhouse gas emissions, and promote public health.
- Promote equitable, affordable housing: Expand location- and energy-efficient housing choices for people of all ages, incomes, races, and ethnicities to increase mobility and lower the combined cost of housing and transportation.

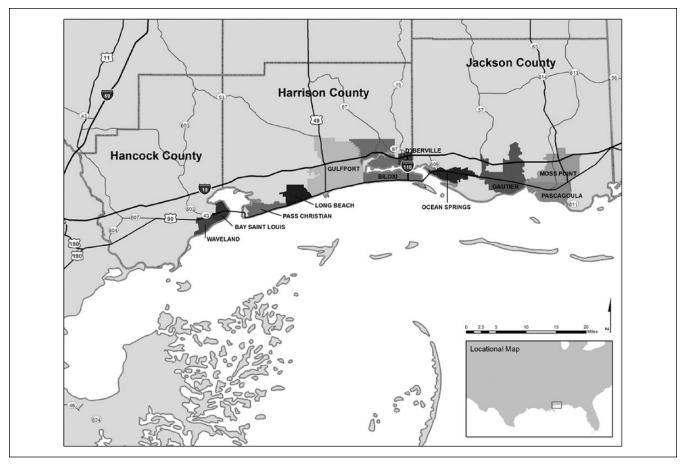


Figure 1. Map of Gulf Coast jurisdictions.

- Enhance economic competitiveness: Improve economic competitiveness through reliable and timely access to employment centers, educational opportunities, services, and other basic needs by workers, as well as expanded business access to markets.
- 4. Support existing communities: Target federal funding toward existing communities—through strategies like transit-oriented, mixed-use development, and land recycling—to increase community revitalization and the efficiency of public works investments and safeguard rural landscapes.
- 5. Coordinate and leverage federal policies and investment: Align federal policies and funding to remove barriers to collaboration, leverage funding, and increase the accountability and effectiveness of all levels of government to plan for future growth, including making smart energy choices such as locally generated renewable energy.
- Value communities and neighborhoods: Enhance the unique characteristics of all communities by investing in healthy, safe, and walkable neighborhoods rural, urban, or suburban.

It is important to note that these principles are not a conceptualization of livability; instead, they are objectives that serve a more comprehensive definition of sustainability that spans national-level economic, environmental and equity goals. Awarded regions were required to conceptualize livability on their own by operationalizing these six principles into a set of indicators that would be reflective of the regional needs (USEPA 2008). Through this process of enabling national sustainability objectives with funding provision, and requiring that awarded regions connect sustainability objectives to conceptions of locally defined livability, a novel linkage was established between these concepts: livable sustainability.

Operationalizing Principles of Livability

The operationalized principles of livability for the Mississippi Gulf Coast region were completed under the region's guidance as one of the first steps in the regional planning process (Table 2). These principles for "livable sustainability" were operationalized in a process facilitated by the Mississippi Gulf Coast regional planning organization and informed by a

Table 2. Mississippi Gulf Coast Region's Operationalized Principles for Livable Sustainability.

| I. Provide More Transportation Choices | 2. Promote Equitable, Affordable Housing | 3. Enhance Economic Competitiveness | 4. Support Existing Communities | 5. Coordinate Federal Policies and Investment | 6. Value Communities and Neighborhoods |
|--|---|--|---|---|--|
| | Opera | tionalized Indicators fo | r Plan Existing Condition | s Data | |
| Alternative transportation networks | Allocation of affordable housing stock | Education attainment by workforce | Access to community services and amenities | Benefits of coordinated investment | Areas for food production |
| Existing road networks | Demographic information | Identification of major employers | Housing data on ownership and vacancy | Conflict management processes | Assessment of hazard exposure |
| Mobility options for nondrivers | Housing burden or purchase capacity | Location of current job centers | Identification of current retail environment | Existing coordinating organizations | Crime rate |
| Portion of trips by car, transit, walking, or bike | Percentage homeownership | Location of dependent care facilities | Location of public transit options | Formal coordination agreements | Health status of residents |
| Proportion households ¼ miles from public transit | Population projection | Location of workforce housing | Location of vacant or underutilized land | Regional preservation initiatives | Households' proximity to healthy food |
| Vehicle miles traveled | Proximity of services to residential locations | Unemployment rates | Physical building condition analysis | Regional sustainable infrastructure practices | Location of pedestrian sheds |
| | Орег | rationalized Indicators f | or Plan Goals and Object | tives | |
| Coordinate transportation with regional plans | Ensure access to quality housing | Catalyze economic development and job creation | Encourage infill for vacant/abandoned parcels | Encourage sustainable stormwater practices | Create a sustainable food system |
| Create safe environment for walking and biking | Invest in expanding affordable housing | Coordinate transportation with business sites | Focus investment toward revitalizing communities | Promote collaboration to increase service efficiency | Focus development away from protected areas |
| Decrease vehicle miles traveled | Provide energy- efficient housing for all incomes | Diversify economic opportunities | Retrofit areas with multimodal transportation options | Promote regional approaches transportation | Preserve natural amenities |
| Promote mixed uses in proximity to transportation | Provide housing options for all ages/abilities | Expand opportunities to for redevelopment or infill | Retrofit communities with interconnected streets | Promote regional energy efficiency approaches | Promote ecotourism |
| Promote multimodal transportation options | Provide location- efficient housing near services | Promote workforce education opportunities | Retrofit communities with parks or public spaces | Promote regional neighborhood stabilization | Promote physical activity through design |
| Provide transport for seniors and the disabled | Reduce combined costs of housing and transport | Provide access to basic needs of workers | Retrofit with mixed uses | Promote regional sharing of housing needs | Protect through hazard adaptation/ mitigation |

regional consortium of partners with expertise in areas such as transportation, housing, environment, design, civil rights, and community engagement. After this process produced the operationalized principles, an HUD-appointed Grant

Technical Representative approved the proposed indicators, thereby confirming an appropriate nexus between local livability needs and their connection to larger sustainability goals of the Sustainable Communities Initiative.³ These

indicators served as the protocol for evaluating the comprehensive plans.

As detailed in Table 2, the region's protocol for livable sustainability defined indicators that should be present in plan goals and objectives and those that should be present in the existing conditions in order to serve as the factual basis for the plan. These indicators served as the basis for the evaluation to determine the current level of compliance of the comprehensive plans for jurisdictions in the region.⁴

Assessment Approach

An established method of plan evaluation was employed to assess the extent to which operationalized principles of livable sustainability were included in fourteen local comprehensive plans from the Mississippi Gulf Coast (Stevens, Lyles, and Berke 2014). Each of the six principles was operationalized into twelve indicators of livable sustainability (refer to Table 2), resulting in seventy-two indicators that were assessed for each comprehensive plan. To assess the presence of these indicators in comprehensive plans, a content analysis was completed for each plan, which included a systematic reading of the comprehensive plan text, figures, tables, and maps. This method for evaluating plans is informed by approaches used in previous evaluation research on comprehensive plan quality (Berke and Godschalk 2009; Berke and French 1994).

Each of the seventy-two indicators was evaluated on a scale of 0 to 2, following a clear interpretation for numerical scoring. A score of 0 indicates that the criterion was absent in the plan, a score of 1 indicates that criterion was present but not detailed, and 2 indicates that the criterion was present and detailed. For example, if a plan does not discuss alternative transportation, a score of 0 is applied. If the plan has a map or mentions an alternative transportation network but provides no detail, a score of 1 is applied. For a plan that has detailed explanations of the alternative transportation network, a score of 2 is applied. Therefore, for each of the six principles, a comprehensive plan could score between 0 and 24 points.

The performance of each plan was assessed using an accepted method of a two-round Delphi-like method that drew on the assessment of two coders, working independent from one another (Stevens, Lyles, and Berke 2014). Assessment of the agreement between the two coders was completed to reduce subjectivity and provide indication of potential reliability problems related to the interpretation of plan criteria by coders. The intercoder reliability score of 92 percent was computed by dividing the number of coder agreements on criteria (926 agreements) for the plan evaluation criteria by the total number of criteria assessed (1,008 criteria). A score of 80 percent or above is considered an acceptable intercoder reliability score (Miles and Huberman 1994). Where there was disagreement in the scores, intercoder dialogue was employed. Differences in the scores on

criteria were discussed until agreement was reached on the final assigned score.

Comprehensive Plan Readiness for Livable Sustainability

Evaluation of the comprehensive plans assessed compliance with the livable sustainability indicators, and results show that the plans currently adopted by the fourteen localities (three county plans and eleven city plans) in the Mississippi Gulf Coast will need considerable adjustments if they are to comply with the Region's objectives for livable sustainability. The overall average percentage score of the comprehensive plans across the six principles was 56 percent, indicating that just over half of the total possible livable sustainability points were attained, on average, by jurisdictions (Table 3). Between plans, this average percentage score ranged from 42 percent (City of D'Iberville) to 74 percent (Harrison County), suggesting considerable variation between jurisdiction plans. Plan scores also varied between the six principles, with an average 76 percent compliance with the Enhance Economic Competitiveness principle and an average 26 percent compliance with the Value Communities and Neighborhoods principle among the fourteen jurisdictions (Table 3).

Plans were grouped into categories (low, moderate, and high) of compliance, or integration of the indicators associated with each of the six principles (Table 3). Overall comprehensive plans scored higher on indicators that are associated with more traditional areas of planning, such as transportation, housing, and economic development, than on areas such as intergovernmental collaboration, valuing neighborhoods and supporting existing communities (see Table 2 indicators). It is notable that the plans scored highest on the objectives related to economic development (i.e., catalyzing job creation or diversifying economic opportunities), with plans integrating an average of 76 percent of the total possible points for the economic development principle (Table 3). Although it has been nearly a decade since Hurricane Katrina impacted Mississippi, many plans connected their goals for economic opportunities and job creation with a continued commitment to establish the Gulf Coast as a positive business environment that is "open for business." However, only a third of the plans provided factual base data on provision of services to support the workforce, such as location of housing opportunities or dependent care facilities.

Comparatively few plans considered the health concerns (i.e., promoting physical activity or a sustainable food system) associated with Valuing Communities and Neighborhoods (Table 3). For example, the Harrison County plan is the only plan that emphasized healthy food access as a priority need in the existing conditions and made it operational through the goals and objectives. This plan included a full chapter dedicated to "Healthy Communities," legitimizing the concern for

Table 3. Degree to Which Each Gulf Coast Jurisdiction Already Integrated the Operationalized Indicators into Its Comprehensive Plan (Plan Scores for Respective Principle of Livability).

| Principle | Low Integration (0-8 Points) | Moderate Integration (9–16 Points) | High Integration (17–24 Points) | Average Score | Average Percentage Score |
|--|---|---|---|------------------|-----------------------------|
| Provide more transportation choices | D'Iberville (5) | Waveland (10), Ocean Springs (11), Gautier (12), Pass Christian (12), Biloxi (13), Bay St. Louis (14), Long Beach (14), Gulfport (16), Moss Point (16) | Jackson County (17), Hancock County (18), Harrison County (19), Pascagoula (20) | 14 | 59 |
| Promote equitable, affordable housing | | Bay St. Louis (13), D'Iberville (14), Hancock County (14), Ocean Springs (16) | Gulfport (17), Long Beach (17), Biloxi (18), Pass Christian (18), Gautier (19), Jackson County (19), Waveland (19), Harrison County (21), Moss Point (21), Pascagoula (22) | 17 | 73 |
| Enhance economic competitiveness | | D'Iberville (14), Ocean Springs (14) | Gautier (17), Hancock County (17), Long Beach (17), Biloxi (18), Pass Christian (18), Bay St. Louis (19), Moss Point (19), Gulfport (19), Jackson County (20), Waveland (20), Pascagoula (21), Harrison County (23) | 18 | 76 |
| Support existing communities | | Hancock County (11), Long Beach (11), Waveland (11), Bay St. Louis (12), Harrison County (12), Jackson County (13), Moss Point (14), Gulfport (15), Pass Christian (15) | Gautier (17), Biloxi (18), D'Iberville (18), Ocean Springs (19), Pascagoula (20) | 15 | 63 |
| Coordinate federal policies and investment | Hancock County (4), Moss Point (4), D'Iberville (7), Long Beach (7), Jackson County (8) | Gautier (9), Bay St. Louis (10), Pass Christian (10), Biloxi (12), Ocean Springs (13), Pascagoula (13), Gulfport (14), Waveland (14), Harrison County (16) | | 10 | 42 |
| Value communities and neighborhoods | Jackson County (2) D'Iberville (3), Bay St. Louis (5), Gulfport (6), Pass Christian (6), Waveland (6), Hancock County (7), Moss Point (7), Ocean Springs (7), Gautier (8) | Biloxi (9), Pascagoula (9), Long Beach (11) | Harrison County (18) | 6 | 26 |

healthy food access using data on current conditions of obesity and chronic diseases associated with unhealthy diets (Harrison County 2008). Similarly, Long Beach was the only other plan that encouraged physical activity through land use design, including a goal to "promote healthy lifestyle choices by improving walkability and connectivity throughout the community" (City of Long Beach 2009, 11).

The variation in plan compliance to livable sustainability objectives points to areas in which planners will have to assume considerable responsibility at the local level to increase attention to policies and issues that can facilitate the region's quest to achieve livable sustainability. This suggests that planners may need to educate localities on the relevance of framing planning priorities in new or different ways.

However, this trend also points to the tension that may exist if these regional priorities are not consistent with how the locality defines quality of life or livability. In both cases, emphasis should be placed on public engagement approaches that can better connect livability preferences associated with what is here and now with what is needed over a longer time horizon.

Three examples of plans were selected for more detailed analysis related to these tensions, based on how well they integrated principles of livable sustainability. These examples highlight variability in the practical tensions between livability and sustainability as well as ways these concepts can work in tandem. The cities with plans scoring among the lowest, highest, and approximating the average score (D'Iberville, Pascagoula, and Biloxi, respectively) were selected for further review, as a means to examine sample challenges and opportunities for linking livability and sustainability. To assist in this comparison of plans, reference is made to the organizing concepts proposed in Part 1, including 1) scale, for example, geography and timing; 2) sensitivity to existing context of a particular place, and 3) potential for future change as imputed through policies for implementation.

Example 1: D'Iberville

Located north of Biloxi, the City of D'Iberville is one of the newest cities on the Mississippi Gulf Coast, incorporated in 1988. Although its traditional economic base is seafood manufacturing, the expansion of nearby Keesler Air Force Base has brought population growth—and with it demand for retail development. The ongoing planning efforts in D'Iberville center on identifying strategies to encourage more dense and pedestrian-friendly development in its downtown and how to distinguish itself as a destination, independent from nearby Biloxi. Overall, D'Iberville's plan scored the lowest on integration of the livable sustainability indicators.

As an example, tensions between livability and sustainability in the D'Iberville plan reveal themselves through the principle that aims to "provide more transportation choices." The plan highlights interest in the establishment of a regional commercial center in D'Iberville, but does not consider transportation in context – specifically, the impact on those who cannot drive, which is prioritized by the region through the indicator, "Provide transport for seniors and the disabled" (Table 2). The plan highlights investments in road networks into the city's commercial areas to "create additional access points along I-10 to allow traffic to enter and exit the city," which some see as likely to help attract casino development despite the concern of residents about how it might impact their quality of life. Similarly, this plan does not show consideration for scale in its transportation goals, which is captured in the indicator to "coordinate transportation with regional plans" (Table 2). D'Iberville residents largely

"choose to seek employment in some other place," making alternative transportation options a significant consideration for environmental sustainability (e.g., reduce vehicle miles traveled) and larger efforts to lower overall household costs (City of D'Iberville 2010, 29). While D'Iberville is one of the densest jurisdictions on the coast—and one of only four with an intra-city connector bus route—its plan did not provide evidence for the location of these bus routes, households with close access, or to what extent transit connects residents with their workplaces inside or outside the city (City of D'Iberville 2010).

Although plan potential—evidence of stakeholder understanding, support, and pursuit of plan interventions—is necessary for political feasibility of implementation (Table 1), the plan offers only token attention to stakeholder engagement. As opposed to other plans in the region that reserved full chapters or sections in the appendices documenting stakeholder involvement, D'Iberville's plan states that "citizens of the community provide feedback to their respective council members through public meetings" and that the plan "objectives were formulated as the result of a series of meetings with the Mayor, City Council members, the City Manager and many other stakeholders in the community" (City of D'Iberville 2010, 1, 9), failing to document the voices of stakeholders or elected officials that could—or could not—assist in implementation priorities.

D'Iberville's plan is an example of comprehensive plans where both livability and sustainability are left as ideal types—both concepts useful as a model, but ultimately they lack practicality and are not realized in the plan content. The plan does not demonstrate high levels of livability related to more transportation choices; there is low integration of the related indicators and language legitimizing investments to develop safe, reliable, and economical transportation choices (Table 2). In this case, quality of life as determined by priorities in the plan comes at the expense of larger-scale sustainability goals such as those to reduce household transportation costs, decrease dependence on fuel, and improve air quality.

Example 2: Biloxi

Biloxi is the oldest city on the Gulf Coast, and since the legalization of gaming in the early 1990s, it remains the region's economic engine and a top tourist destination. Waterfront casinos helped to reinvigorate the city's economy after Hurricane Katrina, creating new jobs in tourism, hospitality, and construction, and funding urban planning projects to accommodate the city's rapid growth. To maintain quality of life, Biloxi has focused on improvements to the well-being of its neighborhoods through investments in infrastructure, recreation, historic preservation, and public safety (City of Biloxi 2009). These areas of investment in health and safety demonstrated in Biloxi's plan contribute to the moderate integration of the principle "value communities and neighborhoods" but also show tensions in its emphasis on

investments for economic and environmental concerns, at the expense of equitable access to these investments.

Biloxi's plan clearly articulates the relevance of scale and potential for implementation of its community health investments, especially through its integration of indicators such as "protect through hazard adaptation/mitigation" and "create a sustainable food system" (Table 2). Because of its position as a regional and national tourist destination, Biloxi's plan recognizes the nonlocal implications of land use decisions, elaborating on the "regional planning context" in which Biloxi interacts and the shared implications of haphazard development (City of Biloxi 2009, 25, 221). The potential for implementation of Biloxi's plan is furthered by its evidence of stakeholder and political buy-in, including strategies such as a citizen advisory board that worked with the City and its consultants for the planning process. Biloxi's plan provides detail of its attention to stakeholder needs, as plan objectives are frequently connected to documented citizen concerns. For example, to substantiate the plan's objective to "preserve Biloxi's tree canopy, including its magnificent live oaks, and encourage planting of native species," the plan specifies that "Biloxi residents and other stakeholders have identified the City's tree canopy, in particular its many live oaks, as a valuable asset in need of protection. Biloxi's live oaks and other native trees add tremendous scenic value . . . they also provide other benefits such as reducing stormwater runoff, limiting soil erosion, providing shade and protection from severe weather" (City of Biloxi 2009, 85).

Within the "value communities and neighborhoods" principle, however, the Biloxi plan does not demonstrate a context that embraces holistic social equity objectives for community health and safety, specifically related to equitable access to healthy food. For instance, the plan reports that "some East Biloxi residents interviewed for the comprehensive plan expressed interest in food production (urban agriculture)" to support produce provision where a large Vietnamese and lower income population reside (City of Biloxi 2009, 30, 118), but the plan does not demonstrate a commitment to increased local food production through its policies. References to community gardens, urban agriculture, and farmers' markets are primarily driven by economic and environmental concerns focused on hazard mitigationrelated property values, stating that "creative and productive uses of open space and vacant lands are encouraged to promote a more resilient land use pattern" (City of Biloxi 2009, 35). In one location, the plan promotes community gardens in a single park as "a vehicle for community building" but it does not indicate who might have access to this space, if food production is permitted or what funding sources may exist to promote food production in public spaces (City of Biloxi 2009, 89).

Biloxi's comprehensive plan illustrates a "satisficing" comprehensive plan example—one that is likely typical in its systematic integration of livability and sustainability, where decision-makers look toward a commonly agreed upon

solution even if it may not be the optimal solution, or one that demonstrates a commitment to more comprehensive sustainability outcomes. By failing to achieve this balance, Biloxi's plan remains limited in its livability without overall sustainability.

Example 3: Pascagoula

The City of Pascagoula is a major industrial city and home to the state's largest employer, a shipbuilding company. Pascagoula's deep water port employs more than ten thousand to handle cargo and build U.S. Navy ships. Analysis of this working-class city's comprehensive plan reveals how the complementarity of livability and sustainability can be realized, in this case to "enhance economic competitiveness," which is further implied through the plan's responses to context, potential, and scale that support its workforce.

The City of Pascagoula's plan shows a *context* for more equitable competition within the workforce, integrating the indicator to "provide access to basic needs of workers" (Table 2), which responds to the region's "increasing number of women in the workforce and . . . numbers of families with children" (City of Pascagoula 2010, 134). Based on demand for convenient child care support services near job centers, the plan states that "the provision of child care close to homes and/or work places will emerge as one of the components of a multifaceted program for child care" (City of Pascagoula 2010, 35). The document links these needs to potential for implementation through the provision of workforce services and basic needs, including the indicator to monitor the "location of dependent care facilities" (Table 2). For example, investment in location-efficient dependent care will be implemented through a Child Care Master Plan and impact assessment of new development on child care needs (City of Pascagoula 2010). Coordination of dependent care services with appropriate employment opportunities, transportation assets, workforce, and educational opportunities equalizes access to economic potential that effectively helps the workforce compete.

The plan document recognizes the importance of geographic *scale* to realizing both livability and sustainability, Pascagoula's interdependent role within the region in promoting holistic economic competitiveness, and the integration of existing needs associated with the "location of workforce housing" in the region (Table 2). The plan document uniquely calls for regional fair share strategies that can support regional workforce needs, especially in proximity to job centers and transit accessibility (City of Pascagoula 2010, 9).

Summary

Although all plans demonstrate tensions between livability and sustainability that are indicative of the high gains of short-term livability and low gains of long-term sustainability, fewer plans also contain synergies between livability and

| Community | Principle | Relationship to Scale | Sensitivity to Context | Future Potential | Nature of Complementarity | Summary of Complementarity |
|-------------|-----------------------------|--------------------------|---------------------------|---------------------|---------------------------|--|
| D'Iberville | Transportation choices | No | No | No | ldeal type | Livability and sustainability lack practicality |
| Biloxi | Community health and safety | Yes | No | Yes | Satisficing type | Limited livability without sustainability |
| Pascagoula | Economic competitiveness | Yes | Yes | Yes | Actualized type | Livability and sustainability reinforce each other |

Table 4. Summary of the Relationship of Plan Examples to Scale, Context and Potential.

sustainability. The three examples presented here represent different scenarios and serve as models that start to depict the linkages between livability and sustainability in practice. These examples point to the potential value brought from realization of the complementarity between local interpretations of livability and broader goals of sustainability, and the perceived challenges.

In the case of the D'Iberville model, challenges can be seen as livability of place is compromised and so are larger sustainability goals. Despite laudable goals in the plan document such as walkability, there is little evidence to suggest that such goals will be realized. There is no direct appeal or provision for alternate transportation approaches that would benefit the residents, because of an apparent disconnect between resident input on livability preferences and city commitment to sustainability beyond economic development goals. Indeed, the transportation planning focus of the city is limited to freeway traffic where an off-ramp is much emphasized, likely to support the city's efforts to attract casino development despite resident pushback. In this model, both livability and sustainability are left as ideal types and the value of the complementarity of these concepts is never realized.

In Biloxi's plan, although the sentiments of livability and sustainability are reflected in formal plan documents, they were not linked together and therefore were harder to operationalize. The plan recognized community health and safety through an environmental protection and hazard mitigation lens, focusing on implications for property values. Though highly integrative of other community health indicators that contribute to community livability, the plan document missed the sustainability imperative for equity inclusion. In this case, both livability and sustainability were compromised because they did not work in concert to enhance quality of life in the form of fresh food provision and meet sustainability requirements for equity of access to such amenities.

The benefits of the complementarity between livability and sustainability are most visible through Pascagoula's plan, where broader goals of sustainability are balanced with specific values and attributes of a particular place. While most plan documents included economic competitiveness indicators, Pascagoula's plan linked place-based economic concerns with national-level workforce equity needs. This model shows how attention to both livability and sustainability in a plan document can start to chart the path that accounts

for both. In this actualized model, the plan document captures the synergies of livability and sustainability and makes each solidly operational.

Implications and Unresolved Questions for Balancing Livability and Sustainability

Brought together, these practical scenarios provoke further discussion in the planning literature about the connections between local interpretations of livability and broader goals of sustainability, and how this connection should further impact planning efforts guided by a sustainability agenda. This analysis moves the conceptions of a "livable" and a "sustainable" community from what have commonly been used as interchangeable terms in planning practice to distinct terms that can sometimes compete, or even complement each other. These complementary linkages capture subtleties of plan-making that have the potential to realize broader sustainability, rather than reinforce observations that local "quality of life" investments are implemented to the detriment of broader sustainability goals. This is a critical viewpoint for planning to acknowledge, especially in response to claims that the future of land use planning depends on its ability to better resolve links between livability and sustainability (Godschalk 2004).

The implications of the findings to planning research and practice are threefold. First, contrary to other research that only prioritizes definitional clarity between livability and sustainability, this analysis finds that a synergistic perspective for planning can be found through analysis of tension, but also through the examination of linkage between these concepts (Allen 2010; Chazal 2010). Where there was high integration of livability indicators in plan documents, livability and sustainability reinforced rather than contradicted each other. For example, the operationalization of livability based on local community conditions makes national sustainability goals relevant to local stakeholders and can therefore be operational at the local level. Similarly, sustainability legitimizes livability investments by providing a long-term vision to which livability initiatives contribute.

Second, inherent linkage between livability and sustainability can be integrated through the careful design of principles of livable sustainability, especially if they respond to tensions in scale, context, and potential for change. As a starting point, the federal Partnership for Sustainable Communities designed a process that required a connection between locally defined livability and national-level sustainability objectives, thereby facilitating "livable sustainability." In order to potentially reconcile the value conflicts relating to the ways in which economic growth, environmental protection, and equitable access to community amenities interact with livability, planners and policymakers should more purposefully engage stakeholders in discussions about the complementarities between livability and sustainability objectives in terms of scale, context, and potential for change.

Funding from this federal program effectively enables awarded regions to better navigate the challenges associated with limited political support and stakeholder understanding for the relevance of long-term sustainability initiatives (Conroy and Berke 2004; Conroy 2006). Evidence from Mississippi Gulf Coast comprehensive plans illustrates ways that livability and sustainability can depend upon and reinforce each other when they are made operational in plans. This is important for planning, given the observation that communities cannot be sustainable unless they are places where people want to live (Roo 2000).

Third, examples of tension between livability and sustainability bolster previous claims that quality of life preferences are implemented at the expense of larger sustainability goals (Newton 2012). Plan analysis, such as those in D'Iberville and Biloxi, showed that communities place emphasis on environmental and economic policies in some cases to the neglect of social equity goals. It is therefore possible that although the federal program created a linkage between sustainability and livability in theory, it is possible that in practice the plans for communities may more closely reflect "sustainable livability." Inclusion of more comprehensive data collection on the location of community services (e.g., public transit, child care, affordable housing) in plan documents may help close this gap by increasing awareness about spatial inequities of community amenities (Agyeman and Evans 2004; Howley, Scott, and Redmond 2009). Because the federal program incentivizing sustainability planning specifically required the integration of equity concerns, there should be oversight of and discussion about the systematic connections between the goals of sustainability and the more pragmatic interpretations of livability.

Unresolved questions remain, highlighting the importance for students, practitioners, and researchers of planning to pursue discussion and advance thinking about the nexus between local priorities for livability and broader objectives for a sustainable future. First, what is the enabling environment (i.e., political support, participation, resource commitment) for the willingness to seek complementarity between local livability and sustainability? Next, if left to their own devices, without an overarching framework of sustainability, would locally operationalized livability simply reinforce existing inequities? Considering the planning process, what should planners do when the local priorities do not complement those of broader sustainability? What is the ethical responsibility of

the planner who is tasked with leading a sustainability plan? Finally, the next step in this field of research is to investigate the processes that communities, which are receiving funding to enable livable sustainability, are using to reconcile these tensions between quality of life preferences and their adherence to sustainability goals. Comparisons between approaches in regions with established culture of acceptance in a sustainability paradigm and regions where the local tenor is much less embracing of the three Es will assist planners and decision makers as they respond to the challenge of emphasizing livability while ensuring a sustainable future.

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Notes

- The six livability principles are as follows: Provide more transportation choices; promote equitable, affordable housing; enhance economic competitiveness; support existing communities; coordinate and leverage federal policies and investment; and value communities and neighborhoods.
- As of the initial writing of this article, the Mississippi Gulf Coast region has not completed its regional planning process and the associated deliverables to the Partnership for Sustainable Communities.
- Dwayne Marsh (HUD Grant Technical Representative), in discussion with the author, February 8, 2011.
- The indicators displayed in Table 2 are slightly abbreviated from original wording, but retain consistent meaning.
- 5. The percentage agreement score for each of the six principles are as follows: (1) Provide more transportation choices: 90 percent; (2) promote equitable, affordable housing: 92 percent; (3) enhance economic competitiveness: 95 percent; (4) support existing communities: 90 percent; (5) coordinate federal policies and investment: 92 percent; and (6) value communities and neighborhoods: 91 percent.

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